

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: Henry H. Jenkins

Examiner: O. Flores Sanchez

Art Unit: 3724

Serial No: 09/580,412

Filed: May 30, 2000

For: STEEL RULE DIE AND STEEL RULE

9213 Chillicothe Rd.  
Kirtland, OH 44094  
March 19, 2008

Commissioner for Patents  
P. O. Box 1450  
Alexandria, Va. 22313-1450

SIXTH SUPPLEMENTAL APPEAL BRIEF

Dear Sir:

In response to the February 19, 2008 action advising applicant that the Fifth Supplemental Appeal Brief was non-compliant, applicant responds by deleting the paragraph on page 17 referred to as making the brief non-compliant. This was discussed with Examiner Sanchez in a telephone conversation on March 11, 2008. In all other respects this Sixth Supplemental Appeal Brief is the same as the Fifth Supplemental Appeal Brief.

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## BRIEF HISTORY

This Fifth Supplemental Appeal Brief is being filed to address the Examiner's Action dated March 8, 2007 wherein it is stated that applicant's communication dated October 19, 2004 is being responded to. It is believed the March 8, 2007 action is in response to the Appeal Brief filed July 20, 2005. In this action the Examiner allowed Claims 1-10 and rejected Claims 11-25 for reasons specifically found in the March 8, 2007 action.

Appellant was given the options of filing a reply under 37CFR 1.111 or requesting reinstatement of the appeal. Appellant requests the latter namely reinstatement of the appeal.

The Fourth Supplemental Appeal brief was filed to address the Examiner's Action dated June 20, 2005 wherein the Third Supplemental Appeal Brief was criticized as not conforming to 37 CFR 41.37. The Third Supplemental Appeal Brief was filed in response to the Examiner's Action dated January 12, 2005 wherein prosecution was reopened and new grounds of rejection of Claims 7-25 were set forth. These new grounds of rejection are extensive and will not be repeated here but will be treated individually further in this brief. Suffice it to say that sixteen (16) new grounds of rejection are involved and include seven (7) references. The reopening came about as a result of Applicant's Second

Supplemental Appeal Brief filed October 19, 2004.

The Second Supplemental Appeal Brief was filed October 19, 2004 in response to the Examiner's Action dated October 13, 2004 wherein it was maintained the previous brief (Supplemental Brief) was defective. The Second Supplemental Appeal Brief incorporated everything from the Supplemental Brief and made the corrections requested in the Examiner's Action dated October 13, 2004.

An appeal in this case was filed April 19, 2002 from a final action dated March 8, 2002. The appeal was briefed by applicant on May 10, 2002 and the Examiner in an action dated July 25, 2003 advised applicant the appeal brief was defective for the reasons stated and advised applicant of the need for a complete new brief. Applicant filed such new brief on August 3, 2002 under the designation "AMENDED NEW APPEAL BRIEF". The Examiner's answer was filed on October 23, 2002 and in this Answer the rejection of claims 1-6 was abandoned and the rejection of claims 7-25 was maintained for the reasons stated in the answer. Applicant filed a Reply Brief on October 29, 2002.

In an action dated September 23, 2003 the Board remanded the case to the Examiner to correct and clarify the record consistent with the Board's remarks contained therein. The Examiner issued an action dated April 13, 2004 as a result

of the Board's action of September 23, 2003 in which claims 1-6 were allowed and claims 7-25 were rejected on new grounds. This new rejection was that claims 7-13 were unpatentable over Johnson (U.S. 5,676,032) in view of Sandford (U.S. 6,085,625) under 35 U.S.C. 103(a) and claims 14-25 were anticipated by Johnson (U.S. 5,676,032).

Applicant, in the action of April 13, 2004, was given the choice of filing a reply to the rejections or requesting reinstatement of the appeal. Applicant requested reinstatement of the appeal and filed the Supplemental Brief directed by the Examiner. In order that the board does not have to refer back and forth between previously filed briefs and the Supplemental Brief, an attempt was made to incorporate everything relevant into the Supplemental Brief.

### REAL PARTY IN INTEREST

The real party in interest is Henry H. Jenkins, the named inventor.

STATUS OF THE CLAIMS:

The status of Claims 11-25 which are under appeal and which are found in the attached appendix is they have all been rejected in the action dated March 8, 2007.

## STATUS OF AMENDMENTS

No amendments have been made to the claims or the description in the prosecution of this application. The Examiner has objected to Claims 1, 7 and 11 in the recitation “a steel rule in said slots” and maintains the recitation should be “a plurality of steel rules in said slots.” Applicant does not agree with this objection and maintains the present language is clear and unambiguous.



## SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention solves a problem found in the art which can be broadly stated as expensive steel rule dies (p2, ln 6) used for example in cutting substrates in the paper or packaging industry. In the blister packaging industry it is conventional to have a plurality of identical blisters carrying a product attached to a large piece of cardboard or substrate. It is normally necessary to separate these blisters into discrete individual products to be presented to the purchasing public. This procedure is normally carried out by the use of steel rule dies (p1, lns 9-14).

The construction of steel rule dies to cut the substrate into pieces having square or 90 degree corners is relatively inexpensive however the substrate so cut leaves the corners easily bent and rendered unattractive to the purchasing public (p1, lns 14-20). Arguably the most attractive corners to be cut are rounded corners however to construct a steel rule die to accomplish this requires the skills of an experienced die maker (p2, lns 1-11).

The present invention solves this problem by the use of a novel steel rule die 26 which can be constructed from a steel member (70A, 70B) claimed in claims 11, 14, 16, 18, 20, 22 and 24 and as shown for example in Figures 7-11 and 15 (p4, ln 20-p5 ln 4) which extends generally along a longitudinal axis and which has its opposite ends 76, 78 extending at a 45 degree angle to the longitudinal axis (p3, ln

17- p4, ln 6). The opposite ends of the steel rule extend on opposite sides of the referenced longitudinal axis (See particularly Figs. 8 and 9). This construction enables the quick and relatively inexpensive construction of a steel rule die 26 as illustrated in Figures 2-6 (p4, lns 13-19) and Figures 12-15 (p5, lns 6-16).

The die 26 (p6, ln 11) as claimed in claim 11 includes a metal plate 36 (p6, ln 17), a top board 40 (p6, ln 17) and a plurality of slots 66 (p7, ln 18) in the top board 40. Steel rules 70 (p7, ln 19) (different lengths 70A, 70B) are located in the slots and have a bottom portion 74 (p8, ln 9) adjacent plate 36 and a top portion 72 (p8, ln 9) formed into a cutting edge 80 (p8, ln 10). As seen for example in Figs 8 and 9 the rule of claims 14, 16, 18, 20, 22 and 24 extends on what has been referred to as on a longitudinal axis and has first and second end portions 76, 78 (p8, ln 9). The end portions 76, 78 extend at a 45° angle to the longitudinal and on opposite sides of the axis (p4, ln 1-6). Figures 11 and 13 show the alternate arrangement of the rules as claimed (Fig. 11, p. 9, ln 3-15). The terminating ends 84 of the rule are illustrated best as seen in Figures 10 and 12. As shown the end portions are integral with the steel member.

The economies of the present invention are realized because only identical steel rules need be used (in the case of square dies) to construct the entire steel rule die and these steel rules can be obtained as off the shelf items. With other

rectangular shaped dies identical rules of two different lengths need be used. This obviates the need for a skilled die maker as where a die with rounded corners is desired and has the advantage of producing a stronger and more durable corner on cut substrate than that produced by dies designed to cut square corners.

Figure 13 is an illustrative example of an assembly of steel rules made in accordance with the teachings of the present invention and identified by the reference numerals 70A and 70B (p7, lns 19-20; p8, lns 1-3; 5, lns 16-19; p9 lns 3-17) to produce a steel rule die 26 in accordance with the invention. This illustrates that identical steel rules may be used throughout with the exception if the cutting perimeter is to be other than square; the length of the rules in one direction would be different than in the other direction. This figure illustrates how the ends of adjacent rules engage each other and Figure 12 shows this engagement in much more detail (p10, lns 8-9).

In addition Figure 13 illustrates how the engagement of the rules creates the so-called inside corner 86(See Figure 11) (p9, ln 13- p10, ln 7) in which is located the cylindrical ejection rubber 90 which is used to eject cut pieces of substrate from the die. As described in the specification when the press comes closed the cylindrical shaped ejection rubber is squeezed into the square configuration to prevent cut substrate from being lodged in corners between the round and square

configurations and when the press comes open the ejection member again assumes its cylindrical shape pushing cut pieces out of this configuration ( p 13, lns 5-7).

## GROUND OF REJECTION TO BE REVIEWED ON APPEAL

### ISSUES

Issue 1. Did the Examiner correctly reject Claims 19 and 21 under 35 U.S.C. 112 as being indefinite?

Issue 2. Did the Examiner correctly reject Claims 14, 15, 17, 20, 21 and 23 under 35 U.S.C. 102 (b) as being anticipated by Shinnick (1,635,964)?

Issue 3. Did the Examiner correctly reject Claims 20-23 under 35U.S.C. 102(b) as being anticipated by Svendsen (3,464,293)?

Issue 4. Did the Examiner correctly reject Claims 11-13 under 35 U.S.C. 103(a) as being unpatentable over Shinnick (1,635,964) in view of Sandford (6,085,625) and Svendsen et al (3,464,293)?

Issue 5. Did the Examiner correctly reject Claims 16 and 22 under 35 U.S.C. 103(a) as being unpatentable over Shinnick (1,635,964) in view of Svendsen et al (3,464,293)?

Issue 6. Did the Examiner correctly reject Claims 18, 19, 24 and 25 under 35 U.S.C. 103(a) as being unpatentable over Shinnick (1,635,964) in view of Simms et

al (3,335,628)?

Issue 7. Did the Examiner correctly reject Claim 24 under 35 U.S.C. 103 (a) as being unpatentable over Svendsen et al (3,464,293) in view of Simms et al (3,335,628)?

Issue 8. Did the Examiner correctly reject Claim 25 under 35 U.S.C. 103(a) as being unpatentable over Svendsen et al (3,464,293) in view of Simms et al (3,335,628) as applied to claims 20, 23 and 24 above, and further in view of Brayton et al (5,943,935)?

### GROUPING OF THE CLAIMS

In the rejection of Claims 10-25 applicant takes the position that Claims 11, 14, 16, 18, 20, 22 and 24 stand or fall on their own. Claims 12 and 13 stand or fall with 11; Claims 15 and 17 stand or fall with 14; Claim 19 stands or falls with 18; Claims 21 and 23 stand or fall with 20; and Claim 25 stands or falls with 24.

## ARGUMENT

Applicant disagrees with the Examiner's position that the references cited either singly or in combination disclose or teach the advantages of the invention disclosed and claimed in this application. As applicant has pointed out, he has made an invention wherein a single (in the case of square die configurations) or at most two steel rules (in other rectangular die configurations) which can be off the shelf items, can be used to create an entire die by simply arranging the novel steel rules by a relatively unskilled workman. The unique configurations at each end of the steel rules enables them to be arranged in end to end relationship to accomplish the making of a steel rule die which can be quickly and economically accomplished.

Indeed all of the references cited by the Examiner point out the novelty and nonobviousness of the present disclosure which enables one to avoid the use of a skilled and expensive die maker to construct dies with curved or rounded configurations. None of the references disclose or suggest the use of identical steel rules of a construction that allows them to be arranged in end to end relation to produce a completed die. This with only off the shelf components. The references used by the Examiner illustrate curved constructions which cannot be put together with off the shelf parts.

### Issue 1

Issue 1 is the rejection of Claims 19 and 25 under 35 U.S.C. 112 as being indefinite. Applicant respectfully disagrees with the rejection because the claims are clear in their recitation of the slots and that they are formed and extend from the lower edge portion of the rule into the steel member. See page 8 of specification and item 88 Figures 7 and 8. Applicant would be pleased to receive any suggestions for amendment.

### Issue 2

Issue 2 is the rejection of Claims 14, 15, 17, 20, 21 and 23 under 35 U.S.C. 102(b) as being anticipated by Shinnick.

### Claim 14

Applicant disagrees that Shinnick discloses the invention of Claim 14 but does not disagree that C and S are steel rule members which have a generally triangular shaped cutting edge.

Here the similarities stop because the reference does not disclose the first and second portions of the claim which extend in opposite directions. The Examiner invites attention to Figure VIII of the Shinnick reference for this disclosure. The rejection does not identify what part of Shinnick meets these terms. The words of the claim



should not be taken in a vacuum but their meaning should be analyzed as in a Markman hearing and in accordance with the instructions of the case of *Markman v. Westview Instruments Inc.*, 52 F. 3d 967, 34 USPQ 2d 1321 (FED CIR.) Affid., 116 S. Ct. 1384, 38 USPQ 2d 1461 (1996).

Arguably any member has first and second end portions which arguably extend in first and second directions. The problem with the Shinnick reference is that it cannot provide the present invention. A plurality of identical Shinnick rules cannot be simply arranged with each other to produce an inexpensive steel rule die. Figure VIII of Shinnick shows the type of curved configuration which requires a skilled die maker to construct.

The disclosure of Shinnick relates to furniture (blocks) for making paper box dies and has as an object self squaring of furniture by means of which dies may be assembled easily. The chase F in Shinnick is a rectangular steel frame in which letter press matter is locked for printing. The furniture in Shinnick may be used in type compositions to frame the type or to act as a filler in type forms.

## Claim 20

The discussion above with respect to Shinnick applies equally well to the patentability of this claim and is incorporated by reference. The differences between Claims 14 and 20 are apparent from a review thereof, however, Claim 20 discusses in detail only one end of the rule however this structure enables the present invention to be accomplished.

#### Claims 15, 17, 21 and 23

As pointed out above, Claims 15 and 17 stand or fall with Claim 14 and Claims 21 and 23 stand or fall with Claim 20.

#### Issue 3

This issue is the rejection of Claims 20-23 under 35 U.S.C. 102(b) as being anticipated by Svendsen et al (3.464)

#### Claim 20

This rejection suffers from the same deficiencies as discussed above and it does not disclose the invention. The structure of this reference discloses the problems the present invention solves. It discloses that a very skilled die maker is needed to create the disclosed configuration and none of the disclosure shows the construction of a rule wherein essentially identical rules may be arranged to enable an unskilled workman to make a die.

### Claim 22

This claim is patentable for the same reasons advanced in the discussion of Claim 20 above. In addition it contains the 45 degree limitation which cannot be found in the art.

### Claims 21 and 23

These claims are said to stand or fall with Claim 20.

### Issue 4

This issue is the rejection of Claims 11-13 under 35 U.S.C. 103(a) as being unpatentable over Shinnick (1, 635,964) in view of Sandford (6,085,625) and Svendson (3,464,293).

### Claim 11

Applicant has discussed Shinnick in detail in Issue 2 and Svendson has been discussed in detail in Issue 3. These discussions and comments apply equally well here and are incorporated by reference. Sandford's plate 52 is not the plate of the claim. See Figures 5A and 5B of Sandford where the plate 52 has a slot which extends clear through which does not provide support against force on the cutting edge of rule 20.

It is submitted that when one combines the three (3) references of this rejection one does not come up with the claimed invention. You arrive at the same

problems i.e. you must have a skilled die maker to make the die and the die is not constructed of identical rules with 45 degree ends which engage each other to provide a strongly supported juncture.

#### Claims 12 and 13

Claims 12 and 13 stand or fall with Claim 11.

#### Issue 5

This issue is the rejection of Claims 16 and 22 under 35 U.S.C. 103(a) as unpatentable over Shinnick (1,635,964) in view of Svendsen et al (3,464,293).

#### Claim 16

Shinnick and Svendsen have been discussed above in issues 2-4 and applicant's remarks there are incorporated by reference herein.

Applicant disagrees that Shinnick discloses the invention substantially as claimed. It clearly does not disclose the end portion of the rule as properly construed in accord with Markman and as the Examiner acknowledges it does show the end portions formed at an approximately 45 degree angle. The Svendsen reference does not teach of a 45 degree angle but rather a myriad of angles none of which are taught to be important. The Examiner comments that the 45 degree angle is to create the desired shape of cut but seems to ignore that in Applicant's device the 45 degree angle is to provide support and to enable the end to end assembly that

enables identical off-the-shelf rules to be used to easily construct a die.

#### Claim 22

The same arguments as given just immediately above in discussing claim 16 and the discussion of these references in issue 4 are incorporated by reference into the argument for the allowance of this claim.

#### Issue 6

This issue is the rejection of Claims 18, 19, 24 and 25 under 35 U.S.C. 103(a) as being unpatentable over Shinnick (1,635,964) in view of Simms et al (3,335,628).

#### Claim 18

Shinnick has been discussed in Issues 2, 4 and 5 and these arguments are incorporated herein by reference. Simms fails to show or suggest where and how his structure might be incorporated into Shinnick to meet the claim language.

Accordingly Simms does not meet, show or suggest the limitation of the terminating ends of the first and second end portions when they are properly construed. It should be kept in mind that the claim refers to the terminating end of each of the first and second end portions formed on an angle to the vertical.

#### Claim 19

This claim stands for falls within Claim 18.

#### Claim 24

This claim patentability differentiates over Shinnick and Simms for the reason just given above in the discussion of Claim 18. Additionally there is nothing in Simms which would suggest a structure which would enable steel rules to be assembled in end to end relationship to form a corner where the cutting edge extends a greater distance than the other portions.

#### Claim 25

This claim stands or falls with Claim 24.

#### Issue 7

This issue is the rejection of Claim 24 under 35 U.S.C. 103 (a) as being unpatentable over Svendsen et al (3,464,293) in view of Simms et al (3,335,628).

#### Claim 24

Applicant disagrees that Svendsen et al substantially discloses the invention except for the terminating end portions. Simms et al does not add to Svendsen et al because there is no suggestions of how they are to be combined. These two references do not teach how two of the claimed rules can be combined to produce a corner.

### Issue 8

This issue is the rejection of Claim 25 under 35 USC 103(a) as being unpatentable over Svendsen et al. in view of Simms et al. as applied to Claims 20, 23 and 24 above, and further in view of Brayton et al. (5,943,935).

### Claim 25

Applicant assumes the referred to ‘above’ is the rejection in issue 7. The previous arguments given in Issues 3-7 are incorporated by reference into this argument for allowance.

Applicant disagrees that Svendsen et al. substantially shows the invention as discussed above. It will be noted that Claim 25 is said to stand or fall with Claim 24. Applicant does not take the position that slots in the bottom of a steel rule per se is novel and patentable. It is patentable in the recited combination.

## SUMMARY AND CONCLUSION

The Examiner's rejection of Claims 7-25 dealt with in the Fourth Supplemental Appeal Brief used sixteen (16) rejections utilizing some seven (7) references. Subsequent to the Fourth Supplemental Appeal Brief the Examiner rendered the action of March 8, 2007, allowing additional Claims 7-10 in addition to previously allowed Claims 1-6. In most of the rejection found in the March 8, 2007 action the Examiner indiscriminately picks and chooses parts from the references and puts them together to his own liking and then in conclusory fashion states that a claim is anticipated or obvious. No attempt appears to have been made to properly interpret the claim language and then apply the teachings of the claim to the references. In these combination rejections there is a deficiency in pointing out where the art teaches or suggests the alleged combination. The rejections do not point how the combinations are to be made and how the claimed combination yields only predictable results. Applicant points out that the claimed elements work together in an unexpected manner.

The Shinnick disclosure relates to furniture for forming paper box dies. The rules found in Shinnick do not suggest rules having an end construction which enables identical rules to be easily assembled as off the shelf components and which does away with the necessity of a skilled die maker.



Svendsen et al. appears to be a teaching of how to produce a sharper bend in a steel rule than is conventionally possible by use of the construction shown in Figure 5. The Examiner's reference to Fig. 20 in this art is nothing more than is shown in Johnson discussed above. It is not possible to produce an inexpensive die by arranging pieces like those shown in Fig. 20 in end to end relationship.

Sandford is cited (item 52) as showing a plate for the purpose of increasing the stability of the rule die. The plate 52 shown in Sandford does not support the bottom of the steel rule shown therein. Reference may be had to Sandford's Figures 5A and 5B which show the plate 52 as having a slot extending entirely through it and which does not engage or support the bottom of the rule.

Simms et al. used in some of the combination rejections shows a means of connecting the ends of a continuous strip of steel rule which has curved or arcuate corners. This construction is not used in the claimed combination of the present application.

Applicant does not dispute that Brayton et al. show slots in the bottom of a steel rule. It appears that grooves 36 are for the purpose of receiving the inner rails 34 and giving space therefore and not necessarily to obtain better support of the steel rule. (see col. 6 lns. 23-36).

The Examiner's rejection of March 8, 2007 should be reversed.

FEE

A check in the amount of \$150.00 for filing a brief in support of an appeal pursuant to 37 CFR Section 1.17c was included with the filing of the original Appeal Brief. Please charge Woodling, Krost and Rust deposit Account No. 23-3060 for any additional fees required.

Respectfully submitted,

WOODLING, KROST AND RUST

/Kenneth L. Mitchell/

Kenneth L. Mitchell, Reg. No. 36,873

(440) 256-4150

## CLAIM APPENDIX

11. A steel rule die including in combination  
a metal plate,  
a top board located on top of said metal plate,  
a plurality of rule slots in said top board,  
a steel rule in said slots

each of said steel rules being generally flat to fit in a slot and having a  
bottom portion adjacent said metal plate and a top portion formed into a  
cutting edge residing above the surface of said top board,

each said steel rule extending on a longitudinal axis and having first and  
second end portions,

said first end portion extending at approximately a 45 degree angle to  
said longitudinal axis and on one side of said axis,

said first end portion of a given steel rule engaging a next adjacent steel  
rule to form a 45 degree angled corner.

12. A steel rule as claimed in Claim 11 wherein said cutting edge is  
defined by a generally triangular shaped configuration.

13. A steel rule die as claimed in Claim 12 wherein slots are formed extending from said bottom portion into said steel rule to support said steel rule.

14. A rule for use in a steel rule die including a metal member having upper and lower edge portions and first and second end portions,

said first end portion extending at an angle to the extend of said metal member and in a first direction,

said second end portion extending at an angle to the extent of said metal member and in a second direction,

said upper edge portion having a cutting edge formed thereon.

15. A rule as claimed in Claim 14 wherein said rule is steel and is generally flat in a steel configuration.

16. A steel rule as claimed in Claim 15 wherein said first and second end portions are integral with said steel member and each formed at approximately a 45 degree angle to the extent of said steel member and in a direction opposite to each other.

17. A steel rule as claimed in claim 15 wherein said cutting edge is defined by a generally triangular shaped configuration.

18. A steel rule as claimed in Claim 17 wherein the terminating end of

each of said first and second end portions is formed on an angle to the vertical whereby the cutting edge thereat extends axially a greater distance than other portions of the terminating end.

19, A steel rule as claimed in claim 18 wherein slots are formed extending from the lower edge portion into the said steel member to support said steel rule when used in a steel rule die.

20, A rule for use in a steel rule die including a metal member having upper and lower edge portions and first and second end portions,

said first end portion extending at angle to the extent of said metal member and in a first direction, and

said upper edge portion having a cutting edge formed thereon.

21. A rule as claimed in claim 20 wherein said rule is steel and is generally flat in configuration.

22. A steel rule as claimed in Claim 21 wherein said end portion is integral with said steel member and is formed at approximately a 45 degree angle to the extent of said steel member.

23. A steel rule as claimed in claim 21 wherein said cutting edge is defined by a generally triangular shaped configuration.

24. A steel rule as claimed in claim 23 wherein the terminating end of

said first end portion is formed on an angle to the vertical whereby the cutting edge thereat extends axially a greater distance than other portions of the terminating end.

25. A rule as claimed in claim 24 wherein slots are formed extending from the lower edge portion into said steel member to support said steel rule when used in a steel rule die.

## EVIDENCE APPENDIX

NONE

RELATED APPEALS AND INTERFERENCES;

There are no other appeals or interferences which will directly affect or have a bearing on the Board's decision in this pending appeal.